

THE RELATIONSHIP OF HEALTH CONSCIOUSNESS AND PRODUCT SAFETY ON ATTITUDES AND PURCHASE INTENTION TOWARDS *JAMU* AS AN INDONESIAN TRADITIONAL MEDICINE

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ABSTRACT - *Jamu has been used from generation to generation in Indonesia. When modern medications gained popularity in Indonesia, and the people's perspective changed and doubted the health effects and safety of traditional medicine such as jamu, this phenomenon might have eliminated jamu in Indonesia especially from young educated people era. Two hundred fifty randomly-selected university students in Universitas Pelita Harapan Surabaya was being selected as the respondents for this research. The study determined if the young educated university students considered Health Consciousness and Product Safety as influencers in the intention to purchase jamu product. Results from t-tests and path analysis showed that health consciousness significantly affected the attitude toward jamu product. Product safety also significantly affected the attitude toward jamu product. Health consciousness was found to have a direct effect on the intention to purchase jamu product, while attitude fulfilled its role as an intervening variable between product safety and intention to purchase jamu product. The researcher recommends to add more variables for future research and to focus on education and promotion in order to attract more customers for jamu products.*

Keywords: *Health Consciousness, Product Safety, Attitude, Purchase Intention, Jamu*

I. INTRODUCTION AND SIGNIFICANT CONTRIBUTION OF THE STUDY

Long before modern medication had been found, ancient people had been using plants, animals, and mineral to cure and maintain people's health. In

Indonesia, one famous traditional medicine is called *jamu*. *Jamu* is a traditional medicine that comes from plants (or its part), animals (or its part), minerals, or the mixture of it (Kementrian Kesehatan Republik Indonesia, 2003). The usage of traditional medicine in Indonesia has been regulated by the Ministry of Health which categorized Indonesia traditional medicine into four main categories, that is : (1) *Batra Ketramplan/ Skill based traditional medication*, (2) *Batra Ramuan/ Potion based traditional medication*, (3) *Batra Pendekatan Agama/ Traditional medication based on Religious approach* (4) *Batra Supranatural/ Supernatural Healing* (Kementrian Kesehatan Republik Indonesia, 2003).

Jamu itself distributed and produced in both traditional and modern way, both ways are well known in society. However the modern *jamu* producers need to put a logo to differentiate it with other health supplement product or other medicines while the traditional *jamu* is usually sell door to door and made by small to middle company or own by sole proprietorship. In Indonesia, this regulation is including give the mark or symbol in *jamu* production, requiring traditional practitioners to have license, and announce the possible lead to danger practice or material. However, the non-standardized practice of traditional medicine and practitioner is still occurring especially in rural areas, the other consideration is that many customers of traditional medicine does not report that they are consuming

traditional medicine to the modern doctors (Li-Li, 2009).

There was time when *jamu* faced a hard time to compete with modern medication, however the existence of traditional medicine can be explained by several reasons by its accessibility, affordability, socio cultural appeal, and effectiveness to cure certain diseases which sometimes cannot be cure using modern medication (Addis, 1999). Strong odor and bitter taste is also some reasons of why young people usually unlikely to consume *jamu*, good thing that more modern *jamu* producer made pills, capsules and other forms to overcome the problems.

With more modern and educated people right now, people concern more of what the food being consumed, and the state of well being. Health conscious people might look into *jamu* as a way to maintain health and has less chemical effect for the body. Health Consciousness itself define as the awareness or readiness to take health action (Schifferstein & Ophuis, 1998) cited in (Withanage, & Jayasinghe,, n.d). Health Consciousness can be measured by: Self Health Awareness: awareness of well being and more conscious about their health, health involvement, and self health monitoring (Hong, n.d.); (2) Personal Health Responsibility: feel responsible for their health, and closely equated a “health conscious” person to a “responsible” person (Duta-Bergman, 2004a) in (Hong, n.d.); and, (3) Health Motivation: “a goal-directed arousal to engage in preventive health behaviors,” (Moorman and Matulich, 1993) in (Hong, n.d.).

There has been a standard for a product to be called safe, *jamu* product especially the modern made one, have to be empirically proven to be safe and proven its efficacy. Safety means the requirement that products must be “free” of hazard with an acceptable risk (Auriol & Schilizzi, 2003). Free from hazard is also means that *jamu* consume by the customer would not give any dangerous side effect, however, previous research stated that herb which is also one of the forms of *jamu* claimed to be safer than the safest drug over the counter (Win, 2008). Traditional medicine is possible to have conjoined use with modern medicine, however this joined use must be under tight control by the knowledgeable doctors or professionals to avoid the dangerous side effect of the medication (Jonosewojo, 2011). Side effect is any “accidental” effect of a pharmaceutical product by the normal doses (World Health Organization, 2004). WHO as well as Indonesia government and any other government in other countries already gave the regulation related with the traditional medicine

whether it is in herbs or in any other type of herbal medicine.

From the Health Consciousness and Product Safety, customer response formed attitude toward *jamu* product which is positive or negative, favorable or unfavorable. By the knowledge, information and even experience and influence by people or environment around customer, customer will build the judgment about certain product, which is *jamu*. Attitude toward product itself had been proved to be a strong predictor of purchase intention (Michaelidou & Hassan, 2007). The information about *jamu* is also developing the attitude toward *jamu*, this information might come from television, and other mass media, or even the information from friends, family or even recommendation by doctor. While this information is gathered, customer will also develop feeling toward the object, this feeling is including the favorability toward *jamu*, and also the “judgment” of *jamu* as it is in good or bad. From this evaluation, customer then come to the next stage to take action regarding to the information and experience they already got, this action might be positive and negative, which will be explain more in purchase intention of *jamu*. Previous research conducted by Suprpto and Wijaya (2012) also found that attitude toward organic food has a direct effect to purchase intention of organic food.

Purchase intention, is the interchangeable word that define as the tendency of the person to do a certain action in regards of object attitude (Schiffman, Kanuk, & Wisenblit, 2010). However the attitude and purchase intention is not always result accordingly (Ferguson, 2004). Previous research also stated that Health Consciousness, Product Safety, and also Attitude toward Product will influence or give some effect to Purchase intention for organic product (Suprpto & Wijaya, 2012). In this research, purchase intention was measured by intention as expectation, intention as wants and intention as plans which was based on Soderlund and Ohman (2003).

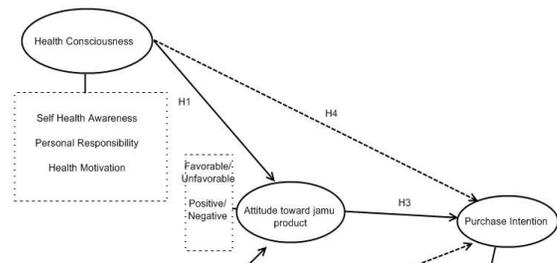


Figure 1
Operational Framework

From advantage and disadvantage of *jamu* product, there has been a new concern of young people to consume *jamu*, even though *jamu* has been existed for long time ago, this well known efficacy and safety might not be attractive enough for young people especially by the idea of *jamu* being bitter and smell awfully. Thus, this research will hopefully give some insight for *jamu* producer for young customer expectation and to encourage government of Indonesia to help the small *jamu* industry to put more standard on the products.

Based on the background, researcher proposed a research entitled “The Relationship of Health Consciousness and Product Safety on Attitudes and Purchase Intention toward *Jamu* as an Indonesian Traditional Medicine”.

II. RESEARCH METHOD

Researcher used the causal research for it to be suitable for the research purpose as hypotheses testing, thus during the research, researcher able to showed the relationship from independent to dependent variables including the intervening variables and to know the influence from independent to dependent variables. The data use for this research used the primary data and secondary data. Primary data obtained from the first source of individual as the respondent by filling up the questionnaire. This primary data come from Universitas Pelita Harapan Surabaya (UPHS) students. While the secondary data came from the previous published study in journals, books, report, and Internet.

The population used for this research was all students in UPHS that include students from six departments from 2008 batch to 2011 batch. As the population is already known as 696 students,

researcher used the simple random sampling technique, thus each of the students in UPHS have the same chance to be selected as a respondent. This sample random sampling offered the generalizability and least bias for the research (Sekaran, 2003). According to (Sekaran, 2003), the probability sampling for 700 population is 248 samples, thus the sample in this research is 250.

This research used quantitative design and used questionnaire to collect data for the research and used likert six points scale which the respondents used to show the agreement or disagreement from the statements.

t-test and path analysis is used for the hypothesis testing which t-test is specially used for hypothesis one, two, and three, while the rest used path analysis as the hypothesis four and five having attitude toward product as the intervening variable.

III. RESULTS

From the data gathering, 84.8 percent of total respondents knew *jamu* from their closest environment like parents, relatives and friends. None of respondent stated that the information of *jamu* come from doctor which made it clear that traditional medication and modern medication still cannot get well as in hand in hand. Most respondents know and have consumed *jamu* in their life even though thirty two respondents came from outside java which might not be the origin of *jamu*.

Table 1
t-test Analysis for H₁, H₂, H₃

Test	H ₁	H ₂	H ₃
Model Summary (R)	0.297	0.759	0.791
Model Summary (R ²)	0.088	0.575	0.625
<i>Standardized Coefficient Beta</i>	0.297	0.759	0.791
Sig.	0.000 ^a	0.000 ^a	0.000 ^a

^aSignificant at the 0.05

Where,

H₁: Health consciousness will significantly affect attitude of *jamu* product.

H₂: Product safety will significantly affect attitude of *jamu* product.

H3: Attitude of *jamu* product will significantly affect Purchase Intention.
 H4: Health Consciousness will significantly affect Purchase Intention toward Attitude of *jamu* product.
 H5: Product Safety will significantly affect Purchase Intention toward Attitude of *jamu* product.

R value for H₁ is 0.297 showed weak relationship between health consciousness to attitude of *jamu* product, this weak relationship means the changes in health consciousness either it is decreasing or increasing, the influence to attitude of *jamu* product will not be significant. Significant value for H₁ is 0.000; therefore, Health Consciousness significantly affects the Attitude toward Product. From the table also shown above, Product Safety significantly effect to attitude toward product and also gave bigger influence to Attitude of *jamu* product than Health Consciousness. The third hypothesis proposed that attitude of *jamu* product will significantly affect purchase intention and showed the significance of 0.000 which is also less than 0.005, thus, the first three hypotheses is accepted as also supported by the previous research by (Michaelidou & Hassan, 2007) stated that health consciousness and food safety will influence attitude toward product.

Table 2
Path Analysis for H₄ and H₅

Test	H ₄	H ₅
Model Summary (R)	0.793	0.807
Model Summary (R ²)	0.628	0.651
<i>Standardized Coefficient Beta</i>	-0.58	0.248
Sig.	0.152	0.000 ^a

^a Significant at the 0.05

Calculation for Hypothesis 4:
 Standard Coefficient β is 0.759
 Standard Coefficient β for Attitude toward Product is 0.808
 Coefficient β in Table 2 is -0.58

$$\begin{aligned} \text{Indirect effect} &= a \times b \\ &= 0.297 \times 0.808 \\ &= 0.239976 \\ \text{Direct effect} &= -0.58 \end{aligned}$$

Intervening Variable is hold true if the indirect effect value is bigger than the direct value.

R² indicate that Health Consciousness through attitude toward product can explain or contribute to purchase intention as much as 0.628, while the rest is explain by other factors. *Standardized Coefficient Beta* showed negative amounts of 0.58 which means the relations is not going hand in hand, when Health Consciousness increase by 1 unit, purchase intention will decrease for 0.58 units. The significance for this hypothesis is bigger than 0.05 which indicates attitudes does not significantly affect health consciousness on purchase intention or in other words, attitude does not intervene the relationship of health consciousness to purchase intention

Calculation for Hypothesis 5:
 Standard Coefficient β for Attitude toward Product is 0.603
 Coefficient β in table 11 is 0.248
 Indirect effect = a x b
 $= 0.759 \times 0.603$
 $= 0.457677$
 Direct effect = 0.248

From the calculation above, indirect effect is bigger than direct effect (0.457677 > 0.248), it means attitude is an intervening variable for this model. Thus, Product safety has influence from Attitude toward Product on Purchase Intention.

Path analysis for attitude toward product affected product safety on purchase intention of *jamu* product and resulted in a significance value of 0.000 which lower than 0.05. This finding proved that attitude not intervening variable for product safety to purchase intention of *jamu* product, by the indirect effect of 0.457677 and direct effect of 0.248. As the indirect effect is bigger than direct effect, it means purchase intention is indirectly affecting purchase intention toward *jamu* which means, for the product safety to influence purchase intention have to go through attitude toward product, hereby the H₅ is accepted.

IV. CONCLUSION

From 5 hypotheses proposed in the beginning of the research, one hypothesis was Rejected (H₄). Attitude toward product is not an intervening variable for Health Consciousness. Product Safety was the strongest influencer for the Attitude toward *Jamu* product while the health consciousness have weak influence in attitude, this might cause for people perspective of *jamu* is the way to heal the illness and not the way to improve health or prevent from sickness. While the product safety being the strongest influencer toward attitude is supported by the

previous research of (Dickieson & Arkus, 2009) stated that Health Consciousness is the casual driver for the customer to purchase organic foods.

Increasing product safety might encourage customer to have positive opinion about *jamu* which eventually lead them to bigger purchase intention. Health Consciousness have a direct effect to purchase intention while product safety have an indirect effect to purchase intention through attitude toward *jamu* product.

Four hypotheses were accepted, namely: (H₁) Health Consciousness significantly affected Attitude toward *jamu* product; (H₂) Product Safety significantly affected Attitude of *jamu* product; (H₃) Attitude toward *jamu* product significantly affected Intention to Purchase *jamu* product, (H₅) Attitude significantly affected Product Safety on Intention to Purchase *jamu* Product.

An area for further research must focus on the comparison between university students and high school students to determine if the level of education will strongly influence the intention to purchase *jamu* product. Researcher recommend for further research about *jamu* to enlarge the scope of research to other universities or might even make comparison from university students and high school students to know if education will really matter for purchase intention of *jamu* and its attitude toward product and even from one city to another. The researcher also suggests adding other variables such as price, cultural influence, availability of product, promotion, as well as use of modes of communication such as the word of mouth.

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